

PROJECT NUMBER: 1620  
PROJECT TITLE: Electrophysiological Studies  
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PERIOD COVERED: November, 1989

I. NASAL EVENT-RELATED POTENTIALS (NERPs)

A. Objective: To develop methods to objectively and reliably evaluate human responses to smoke constituents and tobacco flavorants.

B. Results:

Cognitive NERP Study

Cognitive NERP experiments aimed at evaluating two alternative natural menthol sources (source one and source two) as compared to the current source (control) continue. To date, eight subjects have been presented each comparison.<sup>1</sup> The data from each subject are being analyzed via step-wise discriminant analysis. Preliminary analyses indicate that two of eight subjects could discriminate between the menthol control and the menthol from source one and five of eight subjects could discriminate between the menthol control and the menthol from source two. These results are consistent with subjective tests conducted on these samples and indicate that source one may be a better substitute for the current menthol source than source two.

C. Plans: Complete testing of ten subjects with each alternative vs current menthol comparison and continue to employ step-wise discriminant analyses to analyze the cognitive NERP data from individual subjects. Following the analysis of all of the data, plans are to determine how the degree of discriminability between these menthols relates to the other menthol discriminations that have been tested.

D. Reference:

1. Martin, B. Notebook No. 8846, pp. 71-80.

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